

Application Number 09/867,054
Amendment dated June 24, 2004
Responsive to Office Action mailed March 26, 2004

REMARKS

This amendment is responsive to the Office Action dated March 26, 2004. Applicant has amended claims 1, 3, 4, 8, 9, 13, 14, 21, 22, 31-33, 37, 38 and 43; canceled claims 2, 5, 11, 12, 19, 20, 29, 30, 34, 35, 39 and 40; and added new claims 44 and 45. Claims 1, 3, 4, 6-10, 13-18, 21-28, 31-33, 36-38 and 41-45 are now pending.

In the Office Action, the Examiner rejected original claims 1-15, 22-29, and 31-37 under 35 U.S.C. 102(e) as being anticipated by Deguchi et al. (USPN 6,480,202) (hereafter Deguchi). In addition, the Examiner rejected claims 16 and 17 under 35 U.S.C. 103(a) as being unpatentable over Deguchi; and rejected claims 18-21, 29-30, and 38-43 under 35 U.S.C. 103(a) as being unpatentable over Deguchi in view of Liang (USPN 5,579,031) (hereafter Liang). Applicant respectfully traverses the rejections to the extent such rejections may be considered applicable to the claims as amended. The applied references fail to disclose or suggest the inventions defined by Applicant's amended claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention. Applicant respectfully requests reconsideration by the Examiner in view of the claim amendments and following comments.

The applied references do not disclose or suggest a display including a housing and a processor that adjusts color images within the housing of the display

Applicant's independent claims 1, 22 and 38 have been amended to clarify that the processor that adjusts color images is housed within a housing of the display. This feature is clearly lacking from the applied references.

In section 5 of the Office Action, the Examiner appears to have recognized that the applied references fail to disclose or suggest a color matching processor housed within a display, as now recited in Applicant's independent claims 1, 22 and 38. Applicant respectfully requests reconsideration in view of the amendments to claims 1, 22 and 38.

Neither Deguchi nor Liang discloses or suggests a processor housed within a display, much less a processor that adjusts color images housed within the display. In Deguchi, a color management system (CMS) is described, which specifically addresses the effects of ambient light on display devices. However, nothing in Deguchi suggests that the processing steps

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performed by the CMS could take place in an internal processor housed within the display, nor recognizes the advantages that can be achieved by use of display with its own internal processor.

Likewise, Liang also lacks any teaching that would have led a person of ordinary skill in the art to modify the Deguchi system to provide a color matching processor housed within a display. As noted by the Examiner, in Liang, color processing takes place in a workstation that is totally separate from the displays. See section 5 of the Office Action.

Applicant's disclosure is the only reference of record that describes a processor, housed within a display, that adjusts color images presented by the display. Moreover, Applicant's disclosure also provides the only teaching of record that recognizes the advantages that can be achieved through use of processor housed within a display. For example, Applicant's disclosure recognizes that the color matching processor housed within the display can eliminate the need for the RGB conversions, e.g., RGB to sRGB and sRGB to RGB, ordinarily required within a host computer that drives a display device. See page 6, lines 22-24 of Applicant's specification. Moreover, the integrated processor may also be configured to perform functions above and beyond those performed by the external color matching modules (CMMs) that typically execute on a host computer. See page 6, lines 25-27 of Applicant's specification.

In view of the amendments to independent claims 1, 22 and 38 and the respective dependent claims, Applicant respectfully requests reconsideration and prompt allowance of these claims.

The applied references do not disclose or suggest an archive coupled to a processor that stores links indicative of a mapping of color input from a source device to a display

Applicant's independent claim 33 has been amended to recite a color matching hardware unit integral with a display device, the hardware unit comprising a housing, an archive in the housing, and a processor in the housing and coupled to the archive. As claimed, the processor receives color input, processes the color input, generates a link indicative of a mapping of the color input from a particular source device to the display device, stores the link in the archive, and outputs altered color image data to the display device.

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Applicant's dependent claims 14-21, 31, 32 and 44 recite various concepts relating to an archive that is within the housing of the display device and/or the generation of a link indicative of a mapping of the color input from a particular source device to the display device. These features are also lacking from the applied references.

In particular, as recited in these various claims, a link is generated indicative of a mapping of the color input from a particular source device to the display device. The link is then stored in an archive, which may be housed within the display, or within a color matching hardware unit integral with the display device. If another color input is later received that is the same as the color input for which the link was generated, the link can be called from the archive, i.e., the archive can be accessed to retrieve the link without needing to re-generate the link. In this manner, storing links indicative of mappings of color input from source devices to the display device can allow display output signals to be sent to a display device much more quickly because computational overhead is avoided. See Applicant's specification, page 15, lines 3-4.

Neither Deguchi nor Liang discloses or suggests an archive that stores links, as claimed, whether the archive is housed within the housing of the display, e.g., as recited in claim 14, or housed within a color matching hardware unit integral with the display device, e.g., as recited in claim 33. For this additional reason, these claims should be allowed.

The current amendments should add further clarification to the concepts of archives and links, as recited in the various claims. Nevertheless, Applicant's wish to briefly comment on the Examiner's rejections to the previous claims that recited the use of archives and/or links. In particular, in rejecting original claim 14, the Examiner indicated that Deguchi discloses an archive coupled to a processor in FIG. 8. However, Applicant respectfully submits that the Examiner misinterpreted Deguchi in concluding that Deguchi teaches an archive. The memory units illustrated and described in Deguchi are not archives insofar as they do not store links, as recited in Applicant's claims. Instead, the memory units in Deguchi are described as storing such things as device profiles, white points and contrast settings.

Also, in relation to original claims 15, 31, 32 the Examiner indicated that Deguchi discloses links, as claimed. However, the passages cited by the Examiner as disclosing links describe nothing more than conversions between color coordinate systems, and do not in any way suggest the generation of links that define a mapping between source device to display

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device. Applicant believes that the current amendments should further address this issue, as many of the pending claims now more specifically define a "link" as being "indicative of a mapping of the color input from a particular source device to the display device." A conventional conversion process for converting from one color space to another is not suggestive of the generation of a link indicative of the mapping between source device to display device, as set forth in claims 15, 31 and 32.

In summary, many of Applicant's pending claims recite the generation of a link indicative of a mapping of the color input from a particular source device to the display device, and the storage of the link in the archive for future re-use. Such features are clearly lacking from any of the applied references. Applicant respectfully submits that many of Applicant's claims should be allowed for these additional reasons, including independent claim 33 and dependent claims 14-21, 31, 32 and 44.

Conclusion

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Applicant does not acquiesce in any of the Examiner's rejections or characterizations of the prior art. Although Applicant has focused the comments above on some of the clear differences between the currently pending claims and the applied prior art, Applicant in no way represents or admits that these are the only differences between the pending claims and the prior art. Accordingly, Applicant reserves the right to provide further comment on other features of the independent or dependent claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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